

ABSTRACT

METHOD FOR FABRICATING THIN FILM TRANSISTORS

[0034] A method is disclosed for forming a thin film field effect transistor. On a preliminary substrate having at least a glass substrate layer and a buffer layer, source and drain metal regions of the transistor are formed for defining an opening, in which a silicon layer, gate oxide layer, and gate metal layer are formed thereafter. A first photoresist pattern having a two-portion structure is used for selectively removing portions of the gate metal, gate oxide, and silicon layers. After forming a second photoresist pattern with a coverage area smaller than that of the first photoresist pattern, it is used for reducing the gate metal layer. By doping a predetermined impurity in the silicon layer, a source region and drain region of a predetermined type is completed.